

## Presentation

### Transit Development Plan for Lincoln, Nebraska

Kick-Off Advisory Committee Meeting  
April 6, 2006



Urbitran Associates, Inc.  
in association with:  
KFH Group, Inc.  
AJM Consulting

## Review Meeting Materials



- Agenda
- Advisory Committee Member List
- Core Staff Contact Information
- Consultant Team Information
- TDP Website
- Scope of Work
- Today's Presentation

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## Welcome and Introductions



- Transit Development Plan Advisory Committee
- Urbitran Consultant Team
- Core Staff

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## Project Background



- Lincoln/Lancaster Comprehensive Plan
- Multi-Modal Study
- Downtown Master Plan
- Various Past Studies



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## Advisory Committee Charge and Purpose



- Charge to the Committee: To discuss and respond to milestone reports, function as a sounding board for issue discussion, contribute ideas and insights, and provide support to the Consultant Team and City Staff throughout the process
- Final project approval will be sought from the StarTran Advisory Board
- Minutes will be taken with entire StarTran Board participating and all meetings will be open to the public
- 6 meetings to be held over approximately a 10-12 month period - additional meetings may be held as needed

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## Project Experience



We have provided implementable results for similar communities throughout the country:

- Champaign—Urbana Transit/University of Illinois
  - Community Transit Services Plan
  - Campus Night Rides Service Plan
  - Campus Major Investment Study
- Bloomington Transit/Indiana University
  - BT Service Development Plan
  - Joint Service Consolidation Study
- Charlottesville Transit/University of Virginia
  - Short Term Transit Development Plan
  - Long Range Strategic Transit Services Vision and Plan
- Pioneer Valley Transit/University of Massachusetts
  - Short Term Transit Operations Programming
  - Management and Organizational Restructuring
- University of Wisconsin/Madison Metro
  - Reorganized L-Line on-Campus Bus Services

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## Urbitran Associates, Inc.



- Multi-disciplinary planning, architecture and engineering firm with over 200 professionals with transit offices in New York, New Haven, and Los Angeles
- Recognized nationally for a wide range of transit studies
  - Transit planning and operations analyses
  - Innovative services planning
  - Strategic and long range plans
  - Management and organization studies
  - ADA and paratransit services planning
  - Financial analyses and fare studies
  - Transit market research
- Extensive project experience in similar settings to Lincoln
- Senior staff with experience administering and operating transit systems, as well as with local, regional and state government

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## Additional Project Experience



- Raleigh NC Transit Development Plan (NC State)
- Citilink/Fort Wayne Transit Development Plan (Ball State)
- St. Cloud MTC (MN) Transit Plan (St. Cloud State)
- Nashville Short Range Transit Plan (Vanderbilt)
- San Luis Obispo Short Range Transit Plan (Cal Poly)
- City of Mankato TDP (Minnesota State University)
- Rutgers University Light Rail Feasibility Study
- New Jersey State University Transportation Master Plan
- Hartford CT Bus Operations Study
- Des Moines IA Downtown Parking Facility and Transit Shuttle Study
- Roaring Forks Transit (CO) Organizational Study
- Middlesex County NJ Transit Organization Study
- Long Island NY Strategic Bus Plan

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### **KFH Group, Inc.**

- Public transportation planning, management consulting, and policy analysis specialists
- Assessments of organizational structures from rural transit providers to major metropolitan areas
- Related assignments include the feasibility of creating a transit district for Williamsburg VA, a short range plan for Durham NC, and a suburban mobility study for Little Rock

### **AJM Consulting**

- Specialists in transit data collection, service evaluation, and operations planning
- Since its founding in 1996, AJM has completed over 48 transit surveys and count programs in support of COA studies
- In 2005, AJM processed one year of APC data (over 2 million samples) for the Orlando FL transit system

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### **Positive Community Attributes**



- Commitment to transit and its role in supporting growth and economic development
- Proactive planning
- Strong base of community support
- Good relationship with the University of Nebraska – Lincoln
- Significant local investment in transit

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### **The Local Setting**



- Nebraska State Capital, home of the University of Nebraska (22,000 students), home to over 250,000 people
- Growth projections which anticipate 360,000 people by 2025
- A strong local economy with a diverse economic base and low unemployment
- A radial pulse transit network operated as a division of the City, six days a week until 7:10 PM

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### **Transit System Issues and Opportunities**



- Maintaining and improving service efficiency and effectiveness
- Providing appropriate transit services in support of community economic development
- Ensuring adequate service area coverage to meet changing needs
- Utilization of creative transit solutions
- Modifying the basic network as the community grows
- Providing the proper range of services to the University
- Identifying the potential benefits of alternative organizational structures

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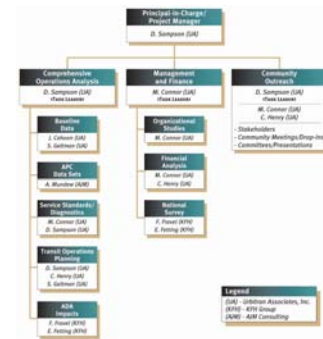
## Previous Recommendations: Multi-Modal Transportation Study



- Near term changes including:
  - Developing core routes
  - Modifying route ends
  - Creating new services
  - Extension of service hours into the evening and to Sundays
  - Full implementation of a modified grid system as recommended in the City-County Comprehensive Plan
- In the longer term (5 – 12 yrs), aggressively re-think the city's approach to transit, drafting a "StarTran Operational Action Plan"

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## Organization Chart



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"Our team's approach to an assignment of this nature is two-fold: to provide experts in each of the technical study areas and to develop a participatory program which involves the consulting team and the client in a consensus building process leading to a successful plan."

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## Principles Guiding the Urbitran Approach



- The planning process must be *customer-focused and market-based*, involving the entire community
- A workable plan always recognizes that there is a core network of successful services and a core group of riders
- A successful plan requires the development of services tailored to local conditions and travel patterns
- A workable plan requires the *creative application of new solutions and technologies*
- The solutions need to be creative but practical and grounded in solid analysis and an understanding of local issues

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## Project Work Plan



The scope of work for the study includes seven phases:

- |               |  |
|---------------|--|
| – PHASE ONE   | Kick-off Meeting                           |
| – PHASE TWO   | Outreach and Meetings Plan                 |
| – PHASE THREE | Comprehensive Operations Analysis          |
| – PHASE FOUR  | Develop Service Standards /Policies        |
| – PHASE FIVE  | Develop Alternatives                       |
| – PHASE SIX   | Develop Organizational and Funding Options |
| – PHASE SEVEN | Draft and Final Report                     |

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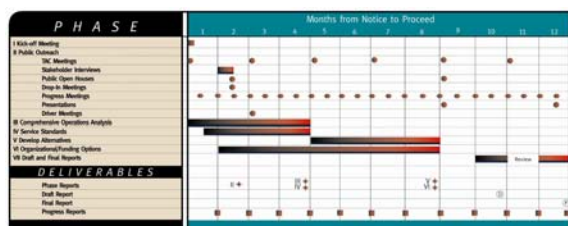
## Balancing Technical Solutions, Creativity, and Local Support



- Public perception and institutional support are vital to the success of the plan, and particularly to any new transit initiatives
- Using a full range of outreach activities provides an accurate understanding of community sentiments and support
- In turn, understanding public sentiment will help position new services:
  - Identification of desirable attributes
  - Exploration of positive and negative images of transit
  - Definition of a preferred vision for transit

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## Project Schedule



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## Public Involvement



- Public participation is a critical component of the process to:
  - Identify local needs early in the process,
  - Maintain contact throughout the process with the community,
  - Build a plan which addresses community issues and needs; and,
  - Develop support for the final plan
- Needs assessment and consensus building can only succeed with strong and effective public participation

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## Public Involvement



- **Urbitrans Associates has a long-standing history of conducting public outreach programs in support of our technical work**
  - On-site involvement and direction by the project's senior staff
  - Better integration of community input into the technical planning process
  - No "second hand" or interpreted results
  - Parallel scheduling of activities with technical efforts to ensure efficient use of project resources

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## Stakeholder Surveys



- Stakeholder interviews are a focal point of our planning approach. They
  - Provide multiple perspectives of transit in the community
  - Engage the community early in the process
  - Identify issues and priorities for transit in the community
- The consulting team methodology is to conduct the interviews in person. We will
  - Develop a general interview guide
  - Have discussions built around the guide
  - Hold them without local staff and will assure confidentiality to encourage a free exchange of ideas
- We estimate that we will speak with between 25-30 individuals either one-on-one or in small groups

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## Public Participation Strategies



**Our public participation strategies include the following:**

- |                                |                             |
|--------------------------------|-----------------------------|
| • Technical Advisory Committee | • Formal Presentations      |
| • Rider "Drop-In" Sessions     | • Driver/Employee Meetings  |
| • Stakeholder Meetings         | • Public Open Houses        |
| • Website Options              | • Regular Progress Meetings |



*We will work with the City and City-County Planning Department to determine the best participation strategies*

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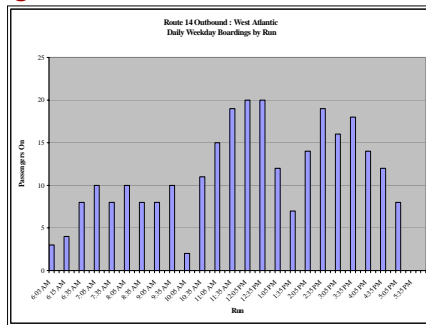
## Using APC Data to Generate On/Off Counts



- The Challenges of Using APC data include:
  - Processing a large database
  - Developing procedures for including a single representative block of transit service when multiple blocks were surveyed.
  - Rationalizing termini boardings, alightings and times
  - Accommodating dwell times in developing on-time performance and running time summaries
  - Developing procedures to accommodate missing or erroneous data due to equipment malfunctions and/or being out of GPS range

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## Boardings by Time of Day: Springfield, MO



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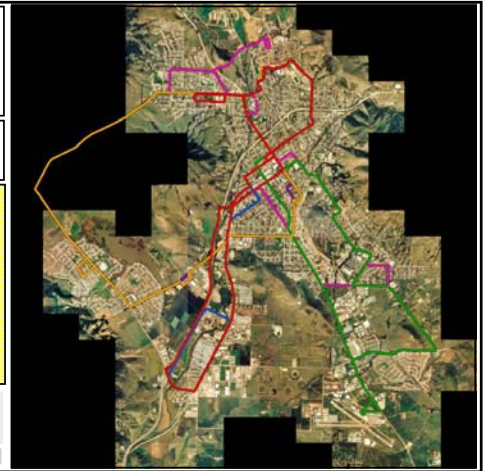
## On / Off Count Visualization

### Step One: Route Structure

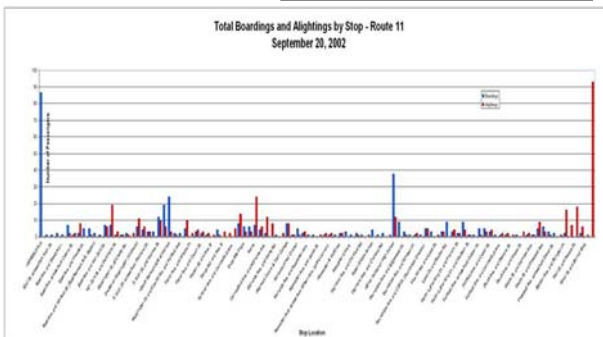
#### Legend:

- Route 14 Outbound
- Route 1
- Route 2
- Route 3
- Route 4
- Route 5
- Route 6

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## On-Off Counts



Route 11 Boardings by Time Norwalk, CT On / Off Counts Urbitran Associates, Inc.

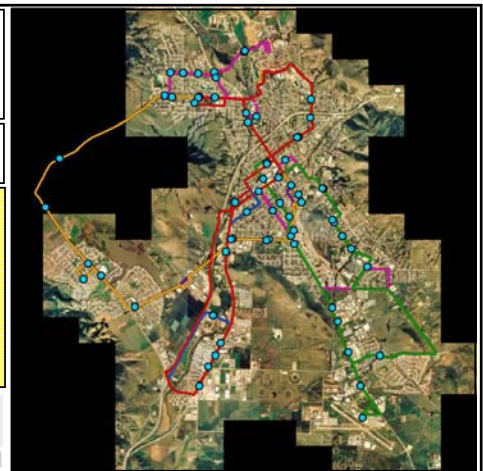
## On / Off Count Visualization

### Step Two: Overlay Ridership Layers

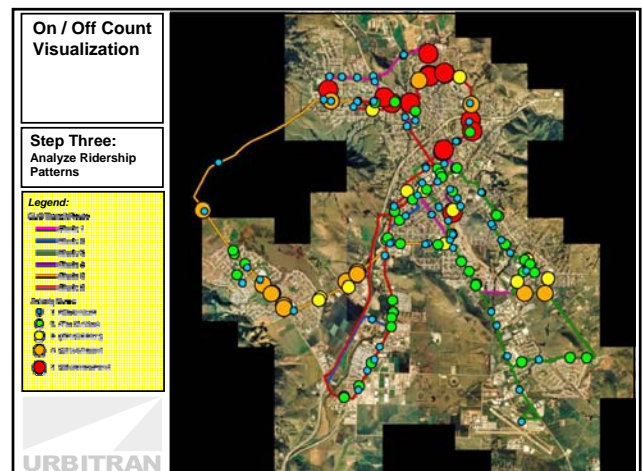
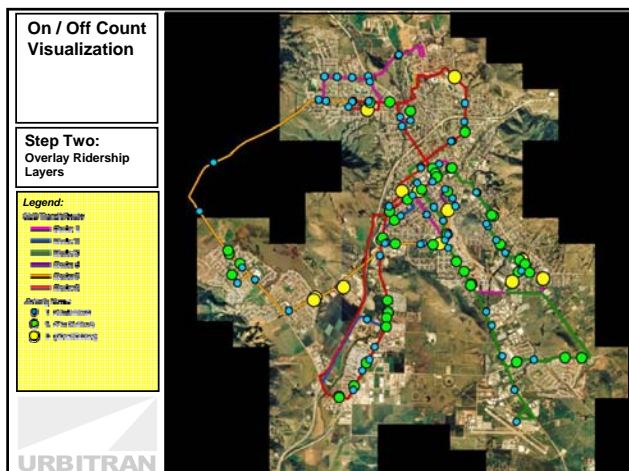
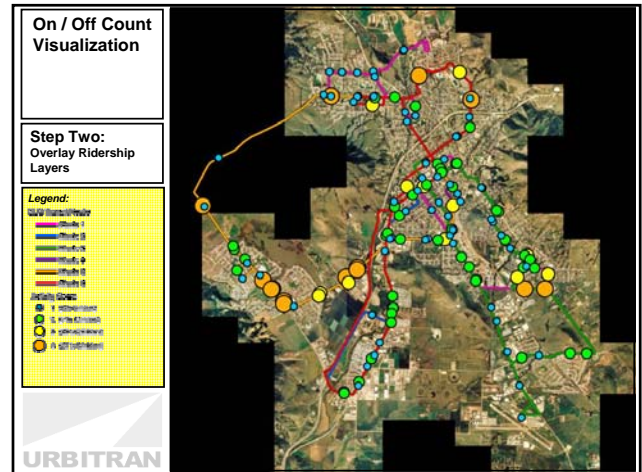
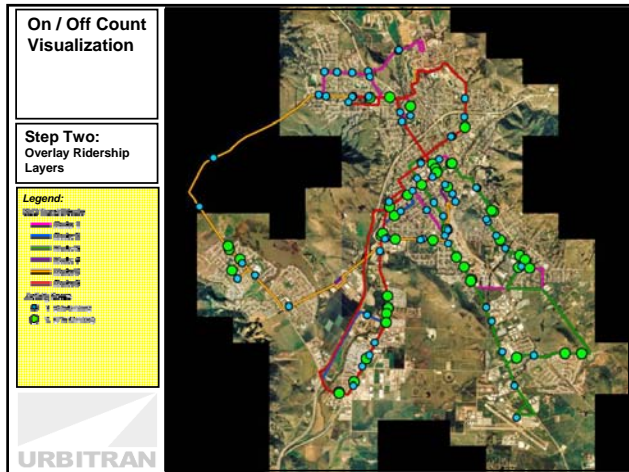
#### Legend:

- Route 14 Outbound
- Route 1
- Route 2
- Route 3
- Route 4
- Route 5
- Route 6
- Boarding Sites
- Alighting Sites

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## Sample Route Profile



Service Span	Route Profile										
	Revenue	Miles	PM	AM	Mid	PM	Even	AM	Mid	PM	Even
Weekday	4:30 AM to 12:34 AM	180.7	192.2	80	6	12	6	15	20	15	20
Saturday	6:53 AM to 12:37 AM	19.5	192.2	5	5	5	5	30	30	30	30
Sunday	7:24 AM to 11:11 PM	39.8	834.5	4	4	4	4	30	30	30	30

Ridership and Productivity											
Boardings				Passengers per Mile				Passengers per Trip			
WK	Est	Stat	Spk	WK	Est	Stat	Spk	WK	Est	Stat	Spk
Total	2,638	1,455	1,205	99	26	18	1.4	0.9	1.2		

Most Active Bus Stops - Weekday			
25 or more boardings	East Station	Shedding Mall	
25 or more alightings	East Station	Loveland Transit Center	

Most Active Bus Stops - Weekend			
25 or more boardings	East Station	Loveland Transit Center	
25 or more alightings	East Station	Shedding Mall	

On-Time Performance			
Weekday		Saturday	
OB	BI	OB	BI
87.0%	92.3%	94.2%	96.5%

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## Congruency Analysis



- An alternative methodology to identify unmet travel markets
  - Identify and map major trip generators
  - Identify travel patterns between zones using regional data sources
  - Create overlays of existing services in GIS platform
  - Identify poorly linked destinations with significant trip patterns
  - Develop alternative solutions/recommendations

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## Service Evaluation and Development of Options

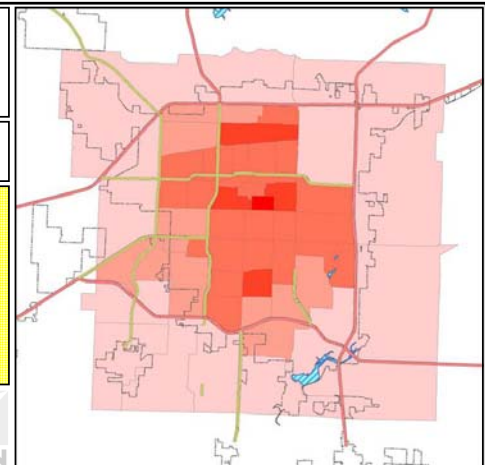


- GIS and congruency analysis
  - Comparative analysis of existing service to community needs
- Service design and performance standards
  - Service coverage
  - Patron convenience & comfort
  - Fiscal condition
- Service assessment/Route diagnostics
  - Service efficiency
  - Service effectiveness
  - Ordinal ranking
- Service options
  - Operational Adjustments: headways, turnbacks, modified routings, etc.
  - Service Enhancements: improved headways, evening services, Sundays, etc.
  - Non-traditional services: Route or point deviation, demand response, shuttles and circulators, etc.
  - System Restructuring: Multiple hubs, modified pulses, grid/modified grid, etc.

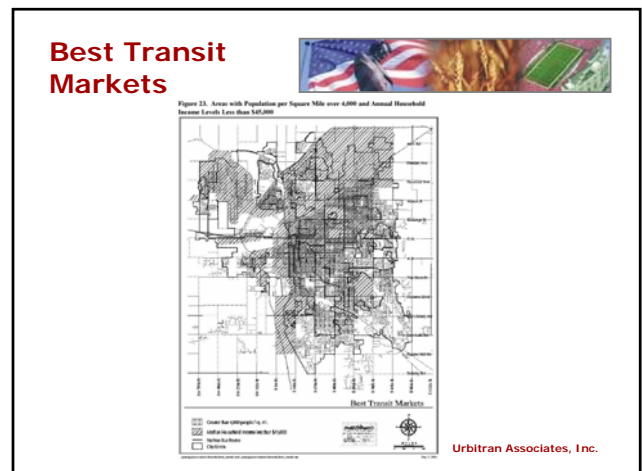
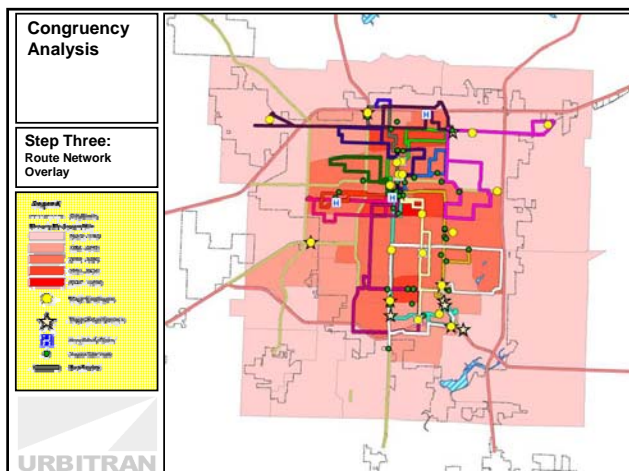
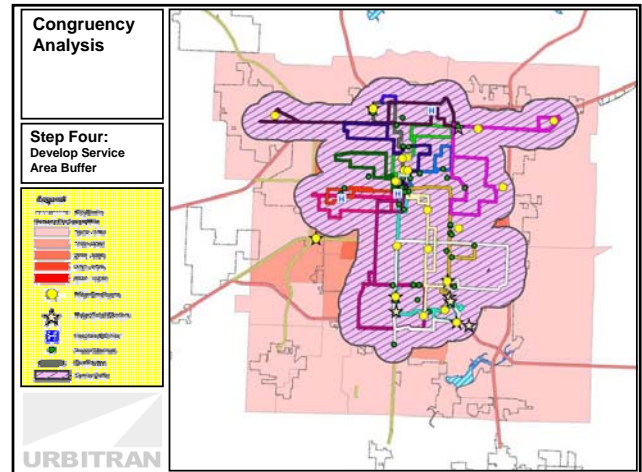
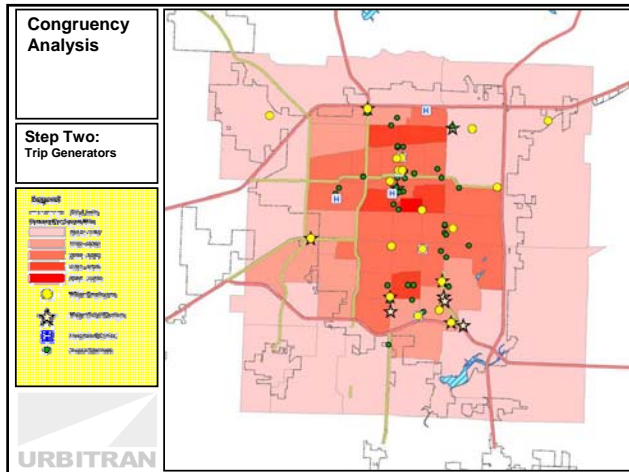
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## Congruency Analysis

### Step One: Demographic Analysis



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(1) Not a state capital

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Source: Janesville, WI Transit Development Plan

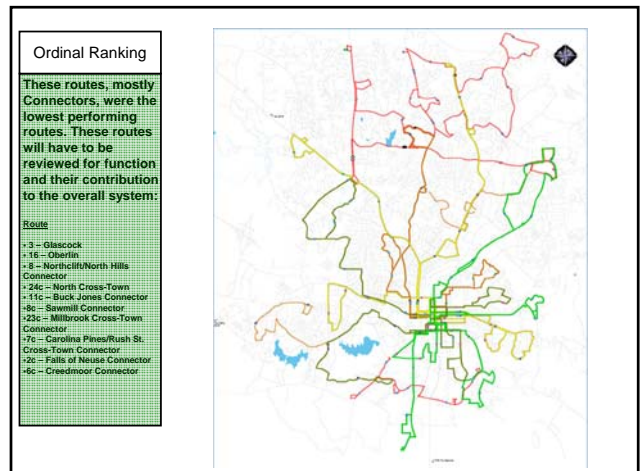
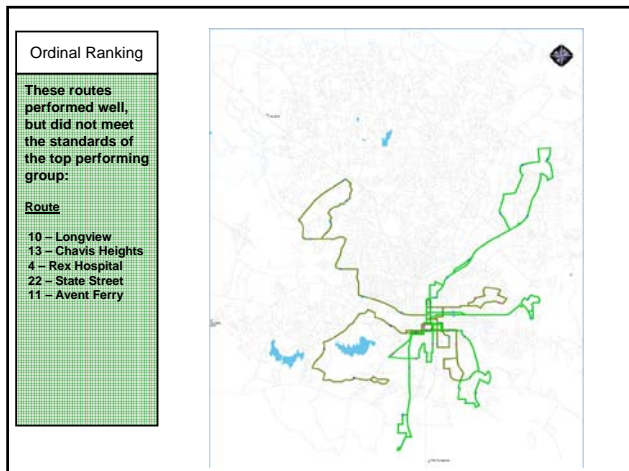
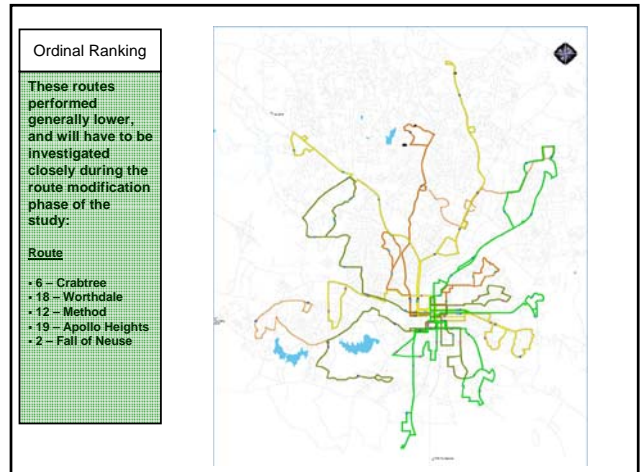
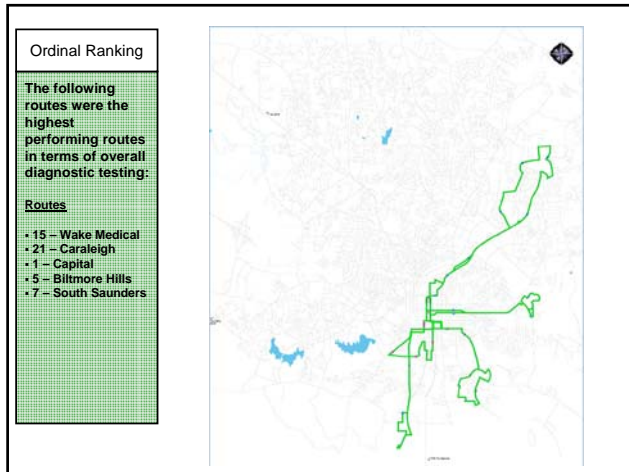
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Source: 2000 National Transit Database, Eau Claire Transit System

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- 
- | Route    | Passenger |
|----------|-----------|
| Route 1  | 26.4      |
| Route 11 | 19.47     |
| Route 4  | 18.09     |
| Route 3  | 15.31     |
| Route 5  | 14.02     |
| Route 9  | 10.36     |
| Route 7  | 9.77      |
| Route 12 | 7.38      |
| Route 20 | 7.52      |
| Route 8  | 7.29      |
| Route 10 | 4.80      |
| Route 13 | 4.16      |
| Route 1  | 4.02      |
| Route 15 | 3.20      |
| Route 2  | 2.70      |
| Route 23 | 1.49      |

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### Creating an Integrated Service Plan



- Explore options with community and staff
  - Provide detailed “sketch” plans to City staff for each alternative
  - Conduct working session to refine alternatives
  - Evaluate cost-effectiveness of each alternative
  - Select locally preferred alternative
  - Prepare operational, capital, and financial plans



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### Draft and Final Reports



- Service Design Plan
  - Short range recommendations
  - Longer range strategic plan elements
- Financial Plan
- Capital Plan
- Management and Organization Plan
- Implementation Schedule

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### Develop StarTran Organizational and Funding Options



- Review existing organization and management structure and funding, and prepare a baseline conditions summary
- Develop a list of potential organizational options including those identified in the RFP
- Identify roles with regard to ownership, policy-setting, planning, operations, staffing, and other functions
- Finalize a set of options with the TAC
- Identify and prepare case studies of peer systems for each option
- Develop evaluation criteria
- Evaluate the advantages and disadvantages of each option and present them in a technical report

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